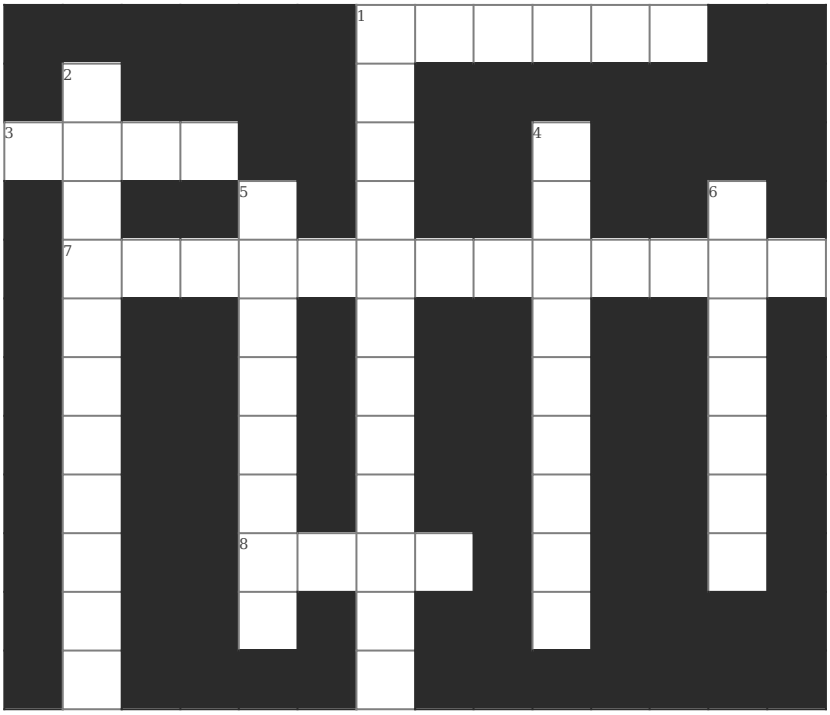
Part 7b · The Crossword

Same rules as an ordinary crossword — but every word is maths vocabulary from this chapter.



ACROSS

1. a polynomial of ___ 2 gives a quadratic equation (6)

3. a value that satisfies the equation (4)

7. method of splitting into two linear factors (13)

8. roots exist here when the discriminant is nonnegative (4)

DOWN

1. the quantity b squared minus 4ac (12)

2. the number multiplying a variable, e.g. a in ax^2 (11)

4. type of equation of the form ax^2+bx+c=0 (9)

5. the ___ form is ax^2+bx+c=0 (8)

6. x = (-b plus or minus root of discriminant) over 2a (7)

You can now recognise a quadratic equation in disguise, solve it by factorisation, and — without solving at all — predict how many real roots it has just from the discriminant. That is the whole chapter in one sentence. ✔